

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-11. (canceled)

12. (currently amended) [[The]] A blood purifying apparatus comprising according to claim 9, a dialysate feed means, a replacement fluid feed means, a drain means, a blood purifying device, and a blood circulation path consisting of a blood drawing line and a blood retransfusing line, wherein:

said dialysate feed means comprises: a dialysate transfer line of which one end is connected to said blood purifying device and the other end connected to a dialysate reservoir unit; a dialysate transfer pump disposed in said line; a dialysate reservoir container connected to a dialysate branch line branching off on an inlet side of said dialysate transfer pump; and a first shutoff valve attached to said dialysate transfer line upstream of a branch portion;

said replacement fluid feed means comprises: a replacement fluid feeding line of which one end is connected to said blood retransfusing line and the other end connected to a replacement fluid reservoir unit; a replacement fluid transfer pump disposed in said line; a replacement fluid reservoir container connected to a replacement fluid branch line branching

off on an inlet side of said replacement fluid transfer pump; and  
a second shutoff valve attached to said replacement fluid  
transfer line upstream of a branch portion;

said drain means comprises: a drain line of which one  
end is connected to said blood purifying device and the other end  
opened; a drain transfer pump disposed in said line; a drain  
reservoir container connected to a drain branch line branching  
off on an outlet side of said drain transfer pump; and a third  
shutoff valve attached to said drain transfer line downstream of  
a branch portion,

wherein the dialysate reservoir container, the  
replacement fluid reservoir container and the drain reservoir  
container are each equipped with a fluid level sensor, said  
apparatus further comprising a weightmeter for weighing the  
dialysate reservoir container, the replacement fluid reservoir  
container and the drain reservoir container at once, and a  
control unit for controlling the opening and closing of said  
first, second and third shutoff valves and the pump flow rate of  
each of said dialysate transfer pump, said replacement fluid  
transfer pump and said drain transfer pump,

wherein said control unit [[30]] performs a removed  
body fluid weight measuring phase consisting of:

a first phase in which the first, second and third  
shutoff valves ~~15, 16, and 17~~ are opened, whereby said dialysate  
reservoir container [[9]] and said replacement fluid reservoir

container [[10]] are each filled with a fluid while at the same time a fluid is discharged from said drain reservoir container [[8]]; and

a second phase in which said apparatus is controlled with each of said first, second and third shutoff valves ~~15, 16, and 17~~ closed, and a change in the total fluid weight in said dialysate reservoir container [[9]], said replacement fluid reservoir container [[10]], and said drain reservoir container [[8]] during the operation of said apparatus is acquired from information provided by said weightmeter [[20]] in order to weigh the removal weight of body fluid,

wherein said control unit [[30]] controls the flow rate of at least one of ~~the transfer pumps~~ said dialysate transfer pump, said replacement fluid transfer pump and said drain transfer pump such that a desired water-removed weight can be obtained in said second phase.

13. (currently amended) The blood purifying apparatus according to claim [[9]] 12, wherein said control unit [[30]] performs a feed weight measuring phase consisting of:

a third phase in which each of said first, second and third shutoff valves ~~15, 16, and 17~~ is opened, whereby said dialysate reservoir container [[9]] and said replacement fluid reservoir container [[10]] are filled with individual fluids

while at the same time a fluid is discharged from said drain reservoir container [[8]]; and

a fourth phase in which said apparatus is controlled with only the first shutoff valve ~~15 for said dialysate feed means A~~ and the second shutoff valve ~~16 for said replacement fluid feed means B~~ closed, and in which a change in the total fluid weight in said dialysate reservoir container [[9]], said replacement fluid reservoir container [[10]], and said drain reservoir container [[8]] is acquired from information provided by said weightmeter [[20]] so as to calculate a feed weight which is the sum of the weight of replacement fluid and the weight of the dialysate,

wherein said control unit [[30]] controls the flow rate of the dialysate transfer pump and the replacement fluid transfer pump such that a desired feed weight can be obtained during the fourth phase.

14. (currently amended) The blood purifying apparatus according to claim [[12]] 13, wherein ~~a flow rate~~ said control unit is performed controls the flow rate of at least one of the dialysate transfer pump, the replacement fluid transfer pump and the drain transfer pump based on an arbitrary combination of said removed body fluid weight measuring phase and said feed weight measuring phase.

15. (currently amended) The blood purifying apparatus according to claim ~~[[12]]~~ 13, wherein ~~a flow rate said~~ control unit is performed controls the flow rate of at least one of the dialysate transfer pump, the replacement fluid transfer pump and the drain transfer pump by alternately repeating said removed body fluid weight measuring phase and said feed weight measuring phase.

16. (canceled)

17. (currently amended) A method of controlling ~~[[the]]~~ a blood purifying apparatus, ~~according to claim 9,~~ said apparatus comprising a dialysate feed means, a replacement fluid feed means, a drain means, a blood purifying device, and a blood circulation path consisting of a blood drawing line and a blood retransfusing line, wherein:

said dialysate feed means comprises: a dialysate transfer line of which one end is connected to said blood purifying device and the other end connected to a dialysate reservoir unit; a dialysate transfer pump disposed in said line; a dialysate reservoir container connected to a dialysate branch line branching off on an inlet side of said dialysate transfer pump; and a first shutoff valve attached to said dialysate transfer line upstream of a branch portion;

said replacement fluid feed means comprises: a replacement fluid feeding line of which one end is connected to said blood retransfusing line and the other end connected to a replacement fluid reservoir unit; a replacement fluid transfer pump disposed in said line; a replacement fluid reservoir container connected to a replacement fluid branch line branching off on an inlet side of said replacement fluid transfer pump; and a second shutoff valve attached to said replacement fluid transfer line upstream of a branch portion;

said drain means comprises: a drain line of which one end is connected to said blood purifying device and the other end opened; a drain transfer pump disposed in said line; a drain reservoir container connected to a drain branch line branching off on an outlet side of said drain transfer pump; and a third shutoff valve attached to said drain transfer line downstream of a branch portion,

wherein the dialysate reservoir container, the replacement fluid reservoir container and the drain reservoir container are each equipped with a fluid level sensor, said apparatus further comprising a weightmeter for weighing the dialysate reservoir container, the replacement fluid reservoir container and the drain reservoir container at once, and a control unit for controlling the opening and closing of said first, second and third shutoff valves and the pump flow rate of

each of said dialysate transfer pump, said replacement fluid transfer pump and said drain transfer pump,

said method comprising performing a removed body fluid weight measuring phase consisting of:

a first phase ~~in which~~ of opening the first, second and third shutoff valves ~~15, 16, and 17 are opened,~~ whereby said dialysate reservoir container [[9]] and said replacement fluid reservoir container [[10]] are each filled with a fluid while at the same time a fluid is discharged from said drain reservoir container [[8]]; and

a second phase ~~in which said apparatus is controlled with~~ of closing each of said first, second and third shutoff valves ~~15, 16, and 17 closed,~~ and acquiring a change in the total fluid weight in said dialysate reservoir container [[9]], said replacement fluid reservoir container [[10]], and said drain reservoir container [[8]] during the operation of said apparatus ~~is acquired~~ from information provided by said weightmeter [[20]] in order to weigh the removal weight of body fluid,

wherein said control unit [[30]] controls the flow rate of at least one of the transfer pumps 6, 7, and 5 said dialysate transfer pump, said replacement fluid transfer pump and said drain transfer pump such that a desired removal weight of body fluid can be obtained in said second phase.

18. (currently amended) A method of controlling [[the]] a blood purifying apparatus, ~~according to claim 9,~~ said apparatus comprising a dialysate feed means, a replacement fluid feed means, a drain means, a blood purifying device, and a blood circulation path consisting of a blood drawing line and a blood retransfusing line, wherein:

said dialysate feed means comprises: a dialysate transfer line of which one end is connected to said blood purifying device and the other end connected to a dialysate reservoir unit; a dialysate transfer pump disposed in said line; a dialysate reservoir container connected to a dialysate branch line branching off on an inlet side of said dialysate transfer pump; and a first shutoff valve attached to said dialysate transfer line upstream of a branch portion;

said replacement fluid feed means comprises: a replacement fluid feeding line of which one end is connected to said blood retransfusing line and the other end connected to a replacement fluid reservoir unit; a replacement fluid transfer pump disposed in said line; a replacement fluid reservoir container connected to a replacement fluid branch line branching off on an inlet side of said replacement fluid transfer pump; and a second shutoff valve attached to said replacement fluid transfer line upstream of a branch portion;

said drain means comprises: a drain line of which one end is connected to said blood purifying device and the other end



opened; a drain transfer pump disposed in said line; a drain reservoir container connected to a drain branch line branching off on an outlet side of said drain transfer pump; and a third shutoff valve attached to said drain transfer line downstream of a branch portion,

wherein the dialysate reservoir container, the replacement reservoir container and the drain reservoir container are each equipped with a fluid level sensor, said apparatus further comprising a weightmeter for weighing the dialysate reservoir container, the replacement fluid reservoir container and the drain reservoir container at once, and a control unit for controlling the opening and closing of said first, second and third shutoff valves and the pump flow rate of each of said dialysate transfer pump, said replacement fluid transfer pump and said drain transfer pump,

said method comprising performing a feed weight measuring phase consisting of:

a ~~[[third]]~~ first phase ~~in which~~ of opening each of said first, second and third shutoff valves ~~15, 16, and 17 is opened~~ whereby said dialysate reservoir container ~~[[9]]~~ and said replacement fluid reservoir container ~~[[10]]~~ are filled with individual fluids while at the same time discharging a fluid ~~is discharged~~ from said drain reservoir container ~~[[8]]~~; and

a ~~fourth~~ second phase ~~in which~~ of controlling said apparatus ~~is controlled with~~ by closing only the first shutoff

valve ~~15~~ for said dialysate feed means A and the second shutoff valve ~~16~~ for said replacement fluid feed means B closed, and in ~~which~~ acquiring a change in the total fluid weight in said dialysate reservoir container [[9]], said replacement fluid reservoir container [[10]], and said drain reservoir container ~~&~~ ~~is acquired~~ from information provided by said weightmeter [[20]] so as to calculate a feed weight which is the sum of the weight of replacement fluid and the weight of the dialysate,

wherein said control unit [[30]] controls the flow rate of the ~~dialysate transfer pumps 6, 7, and 5~~ at least one of said dialysate transfer pump, said replacement fluid transfer pump and said drain transfer pump such that a desired feed weight can be obtained during the ~~fourth~~ second phase.

19. (currently amended) The [[A]] method of controlling the blood purifying apparatus according to claim [[9]] 17, said control method further comprising:

arbitrarily combining ~~an arbitrary combination of the~~ control method based on [[said]] performing the removed body fluid weight measuring phase ~~according to claim 14~~ and based on the control method based on said performing a feed weight measuring phase, said according to claim 15 feed weight measuring phase consisting of:

a third phase of opening each of said first, second and third shutoff valves whereby said dialysate reservoir container

and said replacement fluid reservoir container are filled with individual fluids while at the same time discharging a fluid from said drain reservoir container; and

a fourth phase of controlling said apparatus by closing only the first shutoff valve and the second shutoff valve, and acquiring a change in total fluid weight in said dialysate reservoir container, said replacement fluid reservoir container, and said drain reservoir container from information provided by said weightmeter so as to calculate a feed weight which is the sum of the weight of replacement fluid and the weight of the dialysate,

wherein said control unit controls the flow rate of at least one of said dialysate transfer pump, said replacement fluid transfer pump and said drain transfer pump such that a desired feed weight can be obtained during the fourth phase.

20. (currently amended) The blood purifying apparatus control method according to claim [[19]] 17, said control method further comprising:

alternately repeating the control method based on performing the removed body fluid weight measuring phase and based on [[the]] performing a feed weight measuring phase, said feed weight measuring phase consisting of:

a third phase of opening each of said first, second and third shutoff valves whereby said dialysate reservoir container

and said replacement fluid reservoir container are filled with individual fluids while at the same time discharging a fluid from said drain reservoir container; and

a fourth phase of controlling said apparatus by closing only the first shutoff valve and the second shutoff valve, and acquiring a change in total fluid weight in said dialysate reservoir container, said replacement fluid reservoir container, and said drain reservoir container from information provided by said weightmeter so as to calculate a feed weight which is the sum of the weight of replacement fluid and the weight of the dialysate,

wherein said control unit controls the flow rate of at least one of said dialysate transfer pump, said replacement fluid transfer pump and said drain transfer pump such that a desired feed weight can be obtained during the fourth phase.

21. (new) A blood purifying apparatus comprising a dialysate feed means, a replacement fluid feed means, a drain means, a blood purifying device, and a blood circulation path consisting of a blood drawing line and a blood retransfusing line, wherein:

said dialysate feed means comprises: a dialysate transfer line of which one end is connected to said blood purifying device and the other end connected to a dialysate reservoir unit; a dialysate transfer pump disposed in said line;

a dialysate reservoir container connected to a dialysate branch line branching off on an inlet side of said dialysate transfer pump; and a first shutoff valve attached to said dialysate transfer line upstream of a branch portion;

said replacement fluid feed means comprises: a replacement fluid feeding line of which one end is connected to said blood retransfusing line and the other end connected to a replacement fluid reservoir unit; a replacement fluid transfer pump disposed in said line; a replacement fluid reservoir container connected to a replacement fluid branch line branching off on an inlet side of said replacement fluid transfer pump; and a second shutoff valve attached to said replacement fluid transfer line upstream of a branch portion;

said drain means comprises: a drain line of which one end is connected to said blood purifying device and the other end opened; a drain transfer pump disposed in said line; a drain reservoir container connected to a drain branch line branching off on an outlet side of said drain transfer pump; and a third shutoff valve attached to said drain transfer line downstream of a branch portion,

wherein the dialysate reservoir container, the replacement fluid reservoir container and the drain reservoir container are each equipped with a fluid level sensor, said apparatus further comprising a weightmeter for weighing the dialysate reservoir container, the replacement fluid reservoir

container and the drain reservoir container at once, and a control unit for controlling the opening and closing of said first, second and third shutoff valves and the pump flow rate of each of said dialysate transfer pump, said replacement fluid transfer pump and said drain transfer pump,

wherein said control unit performs a feed weight measuring phase consisting of:

a first phase in which each of said first, second and third shutoff valves is opened, whereby said dialysate reservoir container and said replacement fluid reservoir container are filled with individual fluids while at the same time a fluid is discharged from said drain reservoir container; and

a second phase in which said apparatus is controlled with only the first shutoff valve and the second shutoff valve closed, and in which a change in the total fluid weight in said dialysate reservoir container, said replacement fluid reservoir container, and said drain reservoir container is acquired from information provided by said weightmeter so as to calculate a feed weight which is the sum of the weight of replacement fluid and the weight of the dialysate,

wherein said control unit controls the flow rate of the dialysate transfer pump and the replacement fluid transfer pump such that a desired feed weight can be obtained during the second phase.